

## 2004 SOYBEAN CHEMICAL USAGE

Phosphate was the most commonly used fertilizer on soybeans; it was applied to 26 percent of acreage in the Program States. A total of 1,095.9 million pounds of phosphate were applied to the Program State acreage. Potash was the next most frequently applied fertilizer, with 23 percent of acres planted being treated; a total of 1,733.9 million pounds were applied. Nitrogen had the smallest acreage coverage at only 21 percent of Program State acres.

Herbicides were applied to 97 percent of the Program State acreage though one active ingredient clearly dominated. Glyphosate was used on 87 percent of all the acres treated, 0.73 pounds of glyphosate were applied per acre per application, and 57.7 million total pounds of glyphosate were applied. The next four most widely used active ingredients were chlorimur-ethyl, sulfentrazone, trifluralin and pendimethalin, but their percent of acres treated were much smaller.

Insecticides were used on 4 percent of the Program State acres, but individual active ingredients only covered a maximum of 1 percent of soybean Program State acreage. Fungicides were applied to only 1 percent of the Program State acres; only the active ingredient azoxystrobin was reported.



### SOYBEANS: Acreage, Percent Receiving Fertilizer or Chemicals, Number of Applications, Rates per Application, Selected States, 2004

State	Area Planted	Nitrogen			Phosphate			Potash			Herbicide	Insecticide
		Area Applied 1/	Applications	Rate per Application	Area Applied 1/	Applications	Rate per Application	Area Applied 1/	Applications	Rate per Application	Area Applied 1/	Area Applied 1/
	1,000 Acres	Percent	Number	Pounds	Percent	Number	Pounds	Percent	Number	Pounds	Percent	Percent
IL	9,950	14	1.6	22	18	1.6	66	32	1.6	103	98	1
IN	5,550	15	1.6	24	25	1.5	58	40	1.5	100	99	2/
IA	10,200	10	1.6	24	11	1.5	58	15	1.5	71	98	1
<b>MN</b>	<b>7,300</b>	<b>19</b>	<b>1.7</b>	<b>17</b>	<b>18</b>	<b>1.5</b>	<b>39</b>	<b>16</b>	<b>1.6</b>	<b>46</b>	<b>98</b>	<b>2/</b>
<b>Total 3/</b>	<b>61,150</b>	<b>21</b>	<b>1.5</b>	<b>18</b>	<b>26</b>	<b>1.5</b>	<b>47</b>	<b>23</b>	<b>1.5</b>	<b>81</b>	<b>97</b>	<b>4</b>

1/ Refers to acres receiving one or more applications of a specific fertilizer or chemical.

2/ Data not published due to insufficient number of reports.

3/ Refers to eleven major soybean states including: AR, IL, IN, IA, KS, MN, MO, NE, ND, OH, and SD.

### SOYBEANS: Frequency and Extent of Chemical Usage By Active Ingredient, Minnesota, 2004 1/

Ingredient	Area Applied 2/	Applications	Rate per Application	Rate per Year	Total Applied
	Percent	Number	Pounds per Acre	Pounds per Acre	1,000 Pounds
<b>Herbicides</b>					
Clethodim	3	1.1	0.15	0.16	38
Cloransulam-methyl	5	1.1	0.03	0.03	12
Fomesafem	3	1.2	0.17	0.20	41
Glyphosate	83	1.6	0.72	1.11	6,762
Imazamox	4	1.0	0.02	0.02	7
Imazethapyr	3	1.0	0.04	0.04	9
Pendimethalin	4	1.0	0.80	0.80	235
Sulfosate	2	1.0	1.16	1.16	198
Trifluralin	11	1.0	0.79	0.81	651

1/ Planted acres in 2004 for Minnesota were 7.3 million acres.

2/ Refers to acres receiving one or more applications of a specific chemical.